

A NEW SPECIES OF ISCHNOCLOPIUS STÅL, WITH NOTES  
ON THE SYSTEMATIC POSITION OF THE GENUS  
(HEMIPTERA: REDUVIIDAE)

E. R. HART

Department of Entomology, Iowa State University,  
Ames, Iowa 50010

ABSTRACT—A new species of harpactorine reduviid, *Ischnoclopius peruensis*, is described from specimens collected in the neotropics. The genus and the previously described species, *Ischnoclopius festinans* (Fabricius), are redescribed, and the generic limits and relationships with other genera are examined. The male genitalia of both species are figured.

*Ischnoclopius* was erected by Stål (1868) as a monotypic genus for *Zelus festinans* (Fabricius, 1803). *Ischnoclopius* was distinguished from *Zelus* chiefly by its long, narrow and flattened appearance, its posteriorly widened abdomen and the nearly equal length of the ante- and postocular lobes of the cranium. Current evaluation of *Ischnoclopius* and several closely related harpactorine genera indicates sufficient differences to warrant continued generic status.

*Ischnoclopius* Stål, 1868

*Ischnoclopius* Stål, 1868, p. 106–107, orig. descr.; Stål, 1872, p. 92, cat.; Lethierry and Severin, 1896, p. 150, cat.; Wygodzinsky, 1949, p. 41, checklist.

Long, narrow, body depressed; pale yellowish brown to dark reddish brown in color; pubescence consisting of erect, semi-erect, and decumbent setae. Compound eyes prominent, width of head through compound eyes greater than 1.5 times height of head through ocelli; ocelli only slightly raised above surrounding surface; sides of ante-ocular lobe subparallel; rostrum long, narrow, segment II more than twice length of segment I, apex of segment I not reaching anterior margin of compound eyes; antennae long, slender, with segments I and III of subequal length, each longer than 0.5 times length of protibia, segments II and IV each less than 0.25 times length of I or III. Pronotum flattened, dorsal surface of anterior and posterior lobes in same plane; integument of anterior lobe relatively smooth, faint setal tracts present, small tubercles at dorsolateral angles of collar, medial sulcus shallow; posterior lobe rugulose, humeral angles swollen; legs long, slender, profemur and protibia nearly equal in length, about 0.6 times total length; clavus and corium punctate, apex of clavus transparent, quadrate cubital cell elongate, cells of membrane oriented more transversely than longitudinally. Scutellum with small round medial depression dorsally; apex angulate. Abdominal segments increasingly wider distally, segments VI and VII flared laterally in female. Medial process of pygophore cylindrical, short, curved posteriorly toward apex, apex terminating in small hooklike process; parameres cylindrical, reduced, reaching about 0.5 or less distance from lateral margin to medial process; dorsal phallosomal sclerite semicylindrical; struts fused apically and apex recurved dorsally.

toward base; basal plate arms shorter than dorsal phallothecal sclerite, separate, pedicel less than 0.25 times length of basal plate arms. Tergum VIII extending beyond IX in female.

This genus appears most closely related to *Zelus* Fabricius, *Atopozelus* Elkins (1954), and a new but as yet undescribed genus close to *Zelus*. It shares with these genera the somewhat slender body configuration, elongate profemur longer than or subequal to the metafemur, basal rostral segment noticeably shorter than segment II, subcylindrical cranial lobes, antennal segments I and III subequal, either segment longer than head and thorax combined, with segments II and IV considerably shorter. *Ischnoclopius* differs from these other genera most noticeably by having a depressed body shape and flared abdomen. It is also separated from *Zelus* by the extremely reduced condition of the parameres; from *Atopozelus* by the presence of parameres, more slender profemur and gradually constricted base of the head; and from the undescribed genus by having a single as opposed to bifurcate medial process on the pygophore.

*Ischnoclopius*, along with the aforementioned genera, is apparently confined to the western hemisphere.

*Ischnoclopius festinans* (Fabricius)

Fig. 1-3

*Zelus festinans* Fabricius, 1803, p. 281-282, orig. descr.; Zimsen, 1964, p. 338, list. *Ischnoclopius festinans*, Stål, 1868, p. 107, descr.; Stål, 1872, p. 92, cat.; Lethierry and Severin, 1896, p. 150, cat.; Wygodzinsky, 1949, p. 41, checklist.

Identification not verified:

*Zelus festinans*, Walker, 1873, p. 135, cat.

Length 13-16 mm; integument yellowish brown to dark reddish brown; hemelytra shorter than abdomen in male specimen, barely achieving abdominal apex in female; legs long and slender; prominent spines on humeral angle of male.

Male: Head. Integument light reddish brown with darker areas around ocelli and with anterior area between antennal insertions lighter in color; ante-ocular lobe with erect and semi-erect setae, sparse over most of surface but more dense laterally between antennal insertion and compound eye and on tylus, erect and semi-erect setae over postocular lobe, becoming sparse ventrally; width through eyes about 1.8 times height through ocelli. Posterior surface of rostral segment I yellowish brown, remainder of rostrum reddish brown; pubescence consisting of sparse erect setae; segment II slender, elongate, over twice length of segment I. Antennal segment I yellowish brown with some reddish brown markings near base, remainder of segments reddish brown; erect setae sparse on segment I and base of segment II, becoming more dense distally on segment II.

Thorax. Anterior pronotal lobe yellowish brown to reddish brown with darker areas laterally; semi-erect and decumbent setae on setal tracts on anterior and lateral margins dorsally, over entire surface laterally; anterolaterally-directed tubercle on dorsolateral margin of collar; medial sulcus shallow at collar, deepening near posterior margin; short, wide transverse ridge behind collar on either side

Table 1. Measurements (in mm) of *Ischnoclopius* spp.

	<i>I. festinans</i>			<i>I. peruensis</i>		
	Male	Female A	Female B	Male	Female A	Female B
Length	13.93	15.86	14.14	15.01	18.65	17.90
Width	1.85	2.04	1.70	2.00	2.45	2.30
Anteocular distance	1.40	1.47	1.25	1.40	1.70	1.70
Postocular distance	1.09	1.21	1.17	1.13	1.28	1.28
Width through eyes	1.20	1.32	1.18	1.22	1.42	1.36
Interocular distance	0.51	0.56	0.54	0.52	0.62	0.62
Interocellar distance	0.32	0.29	0.27	0.30	0.34	0.30
Ocular-ocellar distance	0.15	0.16	0.18	0.15	0.16	0.18
Rostral segment I	0.77	0.80	0.76	0.77	0.93	0.92
II	1.62	1.88	1.71	1.70	2.08	2.02
III	0.40	0.38	0.37	0.41	0.49	0.47
Antennal segment I	6.65	7.18	6.64	6.97	8.36	8.36
II	1.40	1.66	1.43	1.70	1.89	1.96
III	6.86	6.53	5.89	—	7.93	6.75
IV	—	1.21	—	—	—	—
Anterior pronotal lobe	0.91	1.02	0.87	0.94	1.17	1.13
Posterior pronotal lobe	1.55	1.70	1.59	1.89	2.19	2.08
Femoral l., pro-	8.47	—	9.11	9.86	12.22	12.00
meso-	5.36	5.68	5.04	5.68	6.75	6.64
meta-	6.54	—	5.57	6.53	7.50	7.50
Femoral w., pro-	0.19	—	0.19	0.21	0.26	0.25
meso-	0.16	0.16	0.16	0.18	0.19	0.21
meta-	0.16	—	0.15	0.19	0.21	0.21
Tibial l., pro-	8.68	—	9.22	9.65	12.65	11.79
meso-	5.79	6.22	5.57	6.32	7.50	6.97
meta-	7.07	—	6.32	7.18	8.36	8.25

of medial sulcus. Posterior lobe yellowish brown to reddish brown with darker areas laterally; decumbent setae over entire surface, some erect setae latero-ventrally; integument rugulose, more pronounced dorsally; faint longitudinal ridges defining medial one-third at anterior margin; humeral angles slightly swollen, male with small lateral spine about same length as diameter of antennal segment I. Scutellum yellowish brown; setae semi-erect; apex slightly extended into small conical process. Legs yellowish brown, apical angles of femur and apical areas of protibia reddish brown; femora with sparse erect setae, meso- and metafemora with single row of very short setae ventrally; tibial setae erect, more dense distally, protibial setae stiffer, more semi-erect or erect; small subtuberculate processes on anterior apical portion of femora. Clavus and corium yellowish brown to reddish brown, apex of clavus transparent, membrane reddish brown; decumbent and semi-erect setae on clavus and corium, with longer erect setae at base of clavus; surface of clavus and corium with punctations; wings shorter than abdomen in observed specimen.

Abdomen. Integument yellowish brown to dark reddish brown, pattern variable but with lighter colors toward lateral margins; short erect setae over entire surface, more dense dorsally and with some long setae ventrally; width gradually increasing toward posterior.

Terminalia. Pygophore reddish brown; short to moderately long setae over exposed surface; base of medial process gradually blending into raised posterior margin of pygophore; parameres cylindrical, shorter than one-half distance from lateral margin to medial process. Dorsal phallosomal sclerite semi-cylindrical; apex relatively straight; dorsolateral expansions arising on basal one-half; struts attached to base, not appreciably expanded at point of dorsal attachment to sclerite; basal plate arms about same diameter as paramere; flattened area of pedicel confined to apical portion.

Female: Slightly larger than male. Humeral angles with faint tuberculate process. Wings barely attaining apex of abdomen. Abdomen more expanded laterally, segments VI and VII more noticeably flared; abdomen darker than male.

Type-data: The female lectotype (NEW DESIGNATION) is deposited in the Universitetets Zoologiske Museum, Copenhagen, and bears the following labels: *Zelus festinans* in Am. mer. Schmidt/Type. A female paralectotype (NEW DESIGNATION) is deposited in the same collection but bears only a red label with the word "Type." This label information agrees with that of the original description by Fabricius (1803) and the generic description of Stål (1868). It is reported by Zimsen and inferred by Fabricius' work that Schmidt collected in the West Indies and the northern countries of South America.

Distribution: Trinidad and northeastern South America.

From the few specimens reported, it is apparent that some variation of the humeral spines is evident, as is the length of the hemelytra.

Material examined: Location unknown (UZM), 1 female lectotype and 1 female paralectotype. Trinidad (USNM), 1 male. Surinam: Moengo, Boven Cottica R., May 19, 1927 (AMNH), 1 female; Moengo, Tapoe, September 22, 1948, (RNH), 1 female.

*Ischnoclopius peruensis* Hart, new species

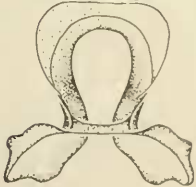
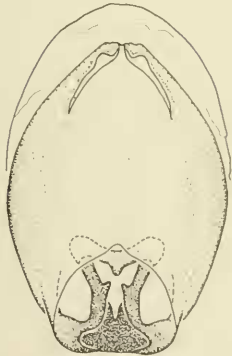
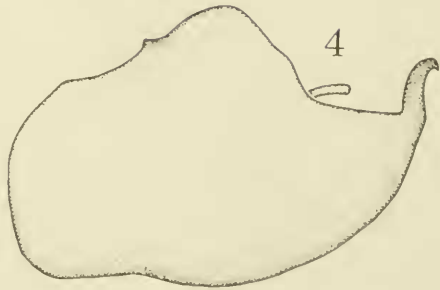
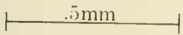
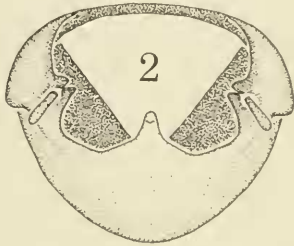
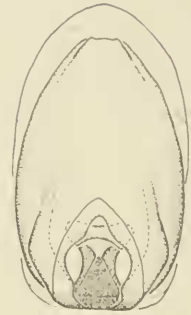
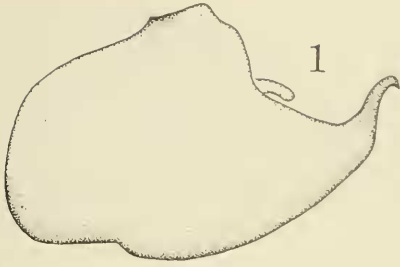
Fig. 4-6

Length 15-19 mm; integument yellowish brown to dark reddish brown; hemelytra exceeding abdomen in length in both sexes; legs long and slender.

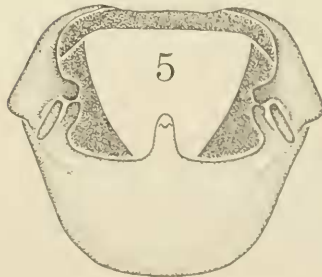
Male: Head. Dorsal surface yellowish brown, lateral and ventral portion reddish brown; ante-ocular lobe with scattered erect setae over entire surface, longer and more dense on tylus, postocular lobe with moderate to long erect and semi-erect setae dorsally and laterally, becoming shorter and less dense ventrally;

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Fig. 1-3. *Ischnoclopius festinans*. 1, pygophore, lateral view. 2, pygophore, posterior view. 3, phallus, dorsal view. Fig. 4-6. *I. peruensis*. 4, pygophore, lateral view. 5, pygophore, posterior view. 6, phallus, dorsal view.



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ante-ocular lobe slightly depressed, subcylindrical, width increasing slightly from immediately anterior to compound eyes to antennal insertions; ocelli only slightly elevated; width through compound eyes about 1.8 times height through ocelli. Basal portion of rostral segment I reddish brown, apical portion of I and basal portion of II yellowish brown, dark reddish brown on III and apical portion of II; short to moderately long erect setae over entire surface; segment II slender, elongate, over twice length of I. Shaft of antennal segment I yellowish brown, segments II-IV and base of apex of I reddish brown; scattered erect setae and row of short erect setae apically on segment I, pubescence on segment II consisting of sparse erect setae becoming more dense apically.

Thorax. Anterior pronotal lobe yellowish brown dorsally and laterally, variable dark reddish brown areas laterally; some short decumbent setae confined to vestigial setal tracts dorsally, anterior margin and dorsolateral areas with longer and more dense semi-erect pubescence, short decumbent setae with scattered erect setae laterally; dorsolateral angles of collar with small tubercle; short wide transverse ridges behind collar on either side of medial sulcus; medial sulcus shallow at collar, becoming only slightly deepened posteriorly. Posterior lobe yellowish brown with some reddish brown areas laterally; inconspicuous, sparse, short, decumbent setae over entire surface, some erect setae lateroventrally; integument rugulose, more pronounced on dorsum; faint longitudinal ridges defining medial  $\frac{1}{3}$  at anterior margin; humeral angles slightly swollen, rounded; disc elevated. Scutellum yellowish brown; surface with semi-erect setae; apex angulate. Legs yellowish brown, dark reddish-brown areas on profemur, protibia and apical angles of all femora; femora with sparse erect setae, meso- and metafemora with single row of very short setae ventrally, tibial setae semi-erect or erect, increasing in density apically, some setae longer than tibial diameters, those of protibia stiffer, more erect. Clavus and corium reddish brown, veins somewhat lighter in clavus and corium, apex of clavus transparent, membrane reddish brown; short decumbent setae over clavus and corium, longer erect setae at base of clavus; surface of clavus and corium with punctations; wings surpassing apex of abdomen.

Abdomen. Yellowish brown to reddish brown integument; short erect and semi-erect setae over entire surface, more dense dorsally, some long erect setae ventrally, more dense at apex; width gradually increasing toward posterior.

Terminalia. Pygophore reddish brown; exposed surface covered with erect setae; lateral and posterior margins but little raised to base of medial process; parameres cylindrical, shorter than  $\frac{1}{2}$  distance from the lateral margin to medial process. Dorsal phallosomal sclerite semi-cylindrical, ovoid; apex notched; sharp ridgelike processes diverging dorsolaterally from apex, proceeding about one-fifth length of sclerite; struts attached to base, not appreciably expanded at points of attachment to dorsal surface of sclerite; basal plate arms about same diameter as base of medial process of pygophore; pedicel extending to lateral portion of basal plate arms.

Female: Larger than male. Abdomen more noticeably flared laterally toward posterior.

Type-data: The male holotype is deposited in the collection of the California Academy of Sciences, Los Angeles, and bears the following labels: PERU: Monzon Valley, Tingo Maria, 29-XI-1954, E. I. Schlinger and E. S. Ross, Collectors. One female allotype bearing

the same labels except for the date of XI-21-1954, is deposited in the same museum. One female paratype bearing only the label "Chanchamayo, Peru," is deposited in the Rijksmuseum van Natuurlijke Historie in Leiden, The Netherlands.

Distribution: The known specimens are from valleys of the eastern slopes of the Cordillera Central in central Peru.

This species is notably darker and larger than *I. festinans*. The base of the medial process of the pygophore is more distinct from the margin. Also, sharp apical ridges are present on the dorsal phallosclerite and the pedicel has lateral extensions onto the basal plate arms. Female specimens possess less distinctively flared abdominal segments than do those of *I. festinans*. While *I. festinans* is known only from relatively low coastal altitudes, the known habitat of *I. peruensis* is in the comparatively high valleys of the eastern slopes of the Andes.

Nothing has been recorded of the biology or ecology of either species.

#### REFERENCES

- Elkins, J. C. 1954. A new American Harpactorine genus. *Texas Reports on Biology and Medicine*. 12:39-48.
- Fabricius, J. C. 1803. *Systema Rhyngotorum secundum ordines, genera, species, adjectis synonymis, locis observationibus, descriptionibus*. Apud Carolum Reichard, Brunsvigae. vi + 314 p.
- Lethierry, L and G. Severin. 1896. *Catalogue general des Hemipteres*. Vol. 3. R. Friedlander und Fils, Berlin. 275 p.
- Stål, C. 1868. *Hemiptera Fabriciana*. I. K. Svenska Vetensk. Akad. 7:1-148.
- . 1872. *Enumeratio Hemipterorum*. II. Ibid. 10:66-128.
- Walker, F. 1873. *Catalogue of the specimens of Hemiptera Heteroptera in the collection of the British Museum*. London. Pt. 8, 220 p.
- Wygodzinsky, P. 1949. *Elenco sistematico do los Reduviiformes americanos*. Monogr. Inst. Med. Regional. Tucuman. 1:1-102.
- Zimsen, E. 1964. *The Type Material of I. C. Fabricius*. Munksgaard, Copenhagen. 655 p.